TWO NEW ALOES FROM ZULULAND AND TWO FROM THE TRANSVAAL.

(With Plates 19-22.)

By G. W. REYNOLDS.

A further step forward towards the clearing up of our South African Aloes is contributed in the present paper, two new species being described from Zululand, and two from the Transvaal.

Aloe Gerstneri, Reynolds. Species nova, A. petricolae Pole Evans et A. aculeatae Pole Evans affinis. Planta succulenta, acaulescens vel breviter caulescens. Folia 20—30, dense rosulata, arcuato-erecta, lanceolato-ensiformia, usque ad 60 cm. longa, 9 cm. lata; supra planiuscula, subtus convexa, utrinque glauco-viridia, immaculata, laevia; marginibus dentibus brunneis isolatis 4—5 mm. longis, 10—15 mm. distantibus armata. Inflorescentia usque ad 1.3 met. alta, 1—2-ramosa. Racemi cylindrico-acuminati, usque ad 36 cm. longi, 6—7 cm. diam. Pedicelli 5 mm. longi. Bracteae anguste lanceolatae, scariosae, 18 mm. longae, 5 mm. latae. Perigonium 30 mm. longum, cylindrico-ventricosum, leviter clavatum. Segmenta exteriora per 15—17 mm. libera, obscure 5-nervata; interiora nervis tribus congestis carinata. Genitalia 13 mm. exserta. Ovarium 5 mm. longum, 3 mm. diam.

Hab. Zululand: on rocky banks of the Nondweni River at Barklieside 31 miles south of Vryheid, alt. 3,000 ft. approx., fl. 6 March, 1937, Reynolds 2,320! (type) in National Herbarium, Pretoria, also in Bolus Herb., Kirstenbosch. (Plate 19.)

This new Aloe was collected by Rev. F. J. Gerstner about 5 years ago and sent to Kirstenbosch. It was first brought to my notice by Mr. N. S. Pillans, who suggested that I should investigate the species and name it in honour of Rev. Gerstner who has contributed a large amount of material to various Herbaria, and who is at present compiling a Flora of Zululand. Rev. Gerstner kindly imformed me of the locality where he had collected this Aloe, and a special journey was made to Zululand during June, 1936, but it was found that plants had flowered a few months previously, the scapes being very dry. On that occasion, plants were collected and sent to Kirstenbosch (No. 1554/36) and to the Botanical Section, Division of Plant Industry, Pretoria (No. 1396/7/36). During

February, 1937, a large specimen in my garden in Johannesburg showed signs of flowering, and on 6 March another special journey was made to Barklieside, when a few hundred plants were found in full bloom, photographs secured, the description drawn up, and material sent to the National Herb. and Bolus Herb.

A. Gerstneri is found in fairly large numbers on rocky slopes and outcrops on both sides of the Nondweni River at Barklieside (also known as Nondweni Bridge), 31 miles south of Vryheid on the road to Melmoth, where it flowers during February-March. Mr. J. F. de Wet, Vryheid. records that the real home of A. Gerstneri is not at Barklieside, but about 14 miles further on along the Babanango road and eastwards of it, on the granite koppies scattered along the course of the Intintini spruit, a tributary of the White Umfolozi. Mr. de Wet adds, "On the granite formation they grow into much finer bigger plants than the Nondweni quartz. Most of the inflorescences of mature plants have three branches, many plants with two inflorescences bearing six racemes in all." In general habit of growth, leaf, inflorescence, and shape and size of flowers it seems nearest allied to A. petricola Pole Evans, found principally in the Nelspruit and Sabie Districts of the Eastern Transvaal, but the latter flowers during June-July, and has more glaucous, more leathery, more spreading, straighter leaves, shorter pedicels, bicoloured racemes, and flowers more clearly nerved. (Vide Trans. Roy. Soc. S.Af., Part 6, 1917, Plate LIV). Another near ally is A. aculeata Pole Evans, which grows further north in the Lydenburg, Waterberg, Pietersburg and Zoutpansberg Districts of the Transvaal, and as far north as 80 miles south of Salisbury in S. Rhodesia, but this species, which also flowers in June-July, is immediately separated by its very acuteate leaves and larger flowers. (Vide Trans. Roy. Soc. S.Af., Vol. V., Part I, June, 1915, Plates XIV-XV.)

A noteworthy character of A. Gerstneri is the very distinct white base from which the marginal teeth spring. This is a character not found in A. petricola, but it occurs in the Zoutpansberg form of A. aculeata. In young plants of A. Gerstneri, the leaves are usually copiously spiny on both sides, sometimes with a row of spines down the median line dorsally; these spines disappear with age until in mature specimens the leaves are smooth both sides, except sometimes for a few in median line dorsally near apex.

Description.—Plant succulent, acaulescent or shortly caulescent, the stem simple or rarely branched. Leaves 20—30 densely rosulate, arcuate-erect, lanceolate-ensiform, up to 60 cm. long, 9 cm. broad at base; upper surface dull grey-green, flat or slightly concave, immaculate smooth; lower surface convex, immaculate, smooth except sometimes



Fig. 1. Fig. 2. Fig. 3.

Plate 19. Aloe Gerstneri Reynolds.

Figs. 1-2. Plants in natural habitat at Barklieside, 31 miles south of Vryheid, Zululand, fl. 6 March, 1937. (Note.—Fig. 1 represents a typical specimen; Fig. 2 is of a smaller plant with one simple and one forked inflorescence, the racemes shorter than usual.)

Fig. 3. Flowers 1/1, from bud to post-pollination stage.

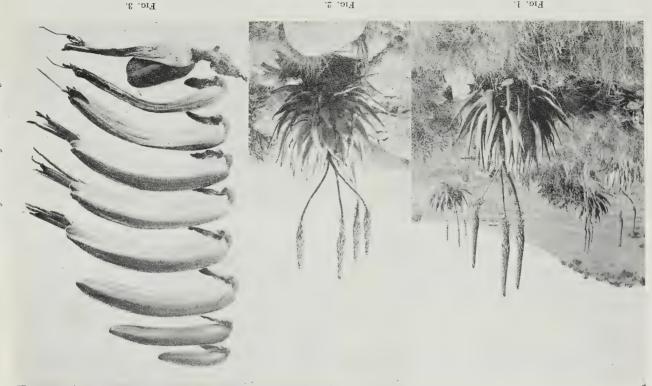


Fig. 1. Plants in natural habitat at Suikerboskop, 13 miles north-west of Belfast, Eastern Transvaal, fl. 4 March, 1937. Fig. 2. Plant in natural habitat near Tonteldoos, about 16 miles north-west of Dullstroom, Eastern Transvaal, fl. 28 Feb., 1937. Fig. 3. Flowers natural size from bud to fruit stage. (Vote.—Flowers are scarlet above, yellow to lemon undermeath.)

Fig. 1. Plate 20. Alos Reizii Reynolds.

for a few thorns in median line near apex; margins armed with isolated pale brown teeth springing from a white base, the teeth pungent, deltoid, 4-5 mm. long, 10-15 mm. distant, more crowded low down, more distant near apex, the interspaces straight, the colour of the leaf. Inflorescence up to 1.3 met. high, simple in young plants, or with 1-2 branches in mature specimens, occasionally 2 from a rosette. Peduncle flattened low down and up to 4 cm. diam., clothed below the racemes with numerous thin, scarious, brown, many-nerved sterile bracts up to 20 mm. long, 8 mm. broad at base. Racemes densely multi-flowered. eylindric slightly acuminate, up to 36 cm, long, 6-7 cm, diam. Bracts narrowly lanceolate, brown, thin, scarious, many-nerved, 18 mm, long, 5 mm. broad at base. Pedicels green, 5 mm. long. Perianth 30 mm. long, reddish-orange, slightly paler underneath, cylindric-ventricose slightly clavate, very shortly stipitate at base and slightly tapering into the pedicel, the mouth slightly upturned. Outer segments free for 15-17 mm., obscurely 5-nerved turning brownish at apex, the margins paler, the apices sub-acute, the 2 upper more closely grouped with their apices slightly falcately connivent. Inner segments free but dorsally adnate to the outer for 10 mm., the upper segment with 3 congested nerves forming a reddish keel, the 2 lower segments with 3 crowded nerves forming a greenish keel turning brownish at apex. Filaments flattened, the 3 inner narrower and lengthening in advance of the 3 outer, pale lemon within the perianth, the exserted portion brownish. Anthers the 3 inner and 3 outer in turn exserted up to 13 mm. Style filiform, pale lemon throughout, the exserted part not changing colour. Stigma at length exserted up to 14 mm. Ovary pale green, 5 mm. long, 3 mm. diam. at base, finely 6-grooved.

Aloe Reitzii, Reynolds. Species nova et pulchra. Planta succulenta, acaulescens vel caulibus usque ad 60 cm. longis. Folia 20—30, dense rosulata, arcuato-erecta, lanceolato-ensiformia, usque ad 65 cm. longa, 12 cm. lata; supra planiuscula, laevia, subtus convexa; marginibus dentibus brunneis 3 mm. longis, 7—15 mm. distantibus armata. Inflorescentia 1—1·3 met. alta; scapus 2—6-ramosus. Racemi cylindrici, leviter acuminati, 35—45 cm. longi, 5—6 cm. diam. Bracteae lanceolato-acutae, scariosae reflexae, 14 mm. longae, 7 mm. latae. Pedicelli 3 mm. longi. Perigonium curvato-cylindricum, rubrum, usque ad 50 mm. longum. Segmenta exteriora per 20 mm. libera, 5-nervata; interiora nervis 5 coalitis carinata. Genitalia 10—12 mm. exserta. Ovarium 9 mm. longum, 4mm. diam.

Hab. Transvaal: On rocky slopes north of Tonteldoos, alt. 5,500 ft. approx., fl. 28 Feb., 1937, Reynolds 2308! (type) in National Herb.,

Pretoria, and Bolus Herb., Kirstenbosch; on rocky slopes of Suikerboskop, fl. 4 March, 1937, Reynolds 2315! in Nat. Herb. and Bolus Herb. (Plate 20.)

This very distinctive new Aloe was first brought to my notice by Mr. F. W. Reitz (son of Dr. Hjalmar Reitz, M.P., and nephew of Col. Deneys Reitz, Minister of Agriculture), who discovered it on rocky slopes and among boulders north of the school at Tonteldoos, about 16 miles northwest of Dullstroom, Eastern Transvaal. Dr. F. Z. v.d. Merwe has found it growing on rocky slopes at Suikerboskop, which is 5 miles west of Schoongezicht School and 13 miles north-west of Belfast, and also records that the species is found in large numbers on the hills near Kliprivier School, 20 miles north of Tonteldoos.

In general habit of growth, rosettes, leaves, and inflorescences, A. Reitzii very closely resembles plants of A. Gerstneri Reynolds, but, as will readily be noticed from the accompanying illustrations, it differs considerably from its allies with its curved flowers 50 mm. in length. A. Reitzii is also allied to A. petricola Pole Evans, but the latter has more spreading, straighter leaves and smaller differently shaped flowers. Another ally, A. aculeata Pole Evans, differs with very aculeate leaves, and very different flowers. These two species flower during June-July, while A. Reitzii and A. Gerstneri flower in February-March.

Another affinity to be considered is A. africana Mill., in the section Pachydendron, to which species A. Reitzii seems allied with its curved 50 mm. long flowers; A. africana is, however, a very different caulescent plant with different leaves and rosettes. (Note: Berger's figures in Das Pflanzenreich, p. 307, figs. D-E-F. of flowers of A. africana are not good representations. In plants in the wild state, plentiful in the Albany Division and elsewhere, the flowers are comparatively longer, narrower and more upturned than those figured by Berger.)

In very young plants of A. Reitzii the leaves are often copiously spiny on both surfaces, but with age these spines disappear, except sometimes for a few dorsally in median line near apex. In mature specimens rosettes reach 3 ft. in diameter; the leaf sap dries brownish, while the flowers secrete a copious supply of clear nectar. A character worthy of mention is that the flowers are bright scarlet above, turning yellow to lemon on the underside; this also occurs in A. aristata Haw.

Flowering in February-March before the frosts, A. Reitzii with its attractive racemes of bright crimson flowers, is a species well worth cultivating. The description is based on personal observations at the Tonteldoos and Suikerboskop localities during February-March, 1937.

Plants are at present in cultivation in the garden of the Botanical Section, Div. of Plant Industry, Pretoria, Nos. 1831.11.36 (ex Tontel-

doos) and 2457.3.37 (ex Suikerboskop); and in the National Botanic Gardens, Kirstenbosch, No. 2327/36 ex Tonteldoos.

Description.—Plant succulent, acaulescent or with stem up to 60 cm., the stem simple, rarely branched. Leaves lanceolate-ensiform, arcuateerect densely resulate, dull green, up to 65 cm, long, 12 cm, broad, the apices armed with a pungent thorn; upper surface flat or slightly concave, smooth, neither spotted nor lineate; lower surface convex, smooth, except sometimes for 4-8 thorns in median line near apex, the thorns pungent brownish, about 2 mm. long, 10-20 mm. distant; the margins armed with deltoid pungent brownish to reddish-brown teeth 3 mm. long, 7—15 mm. distant, more crowded low down, more distant upwards, the interspaces straight, the colour of the leaf or reddish-brown, never corneous. Inflorescence 1-1:3 met. high, 2-6-branched from below the middle. Peduncle 3.5-4.5 cm. diam. low down, ebracteate below the first branch, the branches below the racemes clothed with several sterile bracts. Racemes cylindric slightly acuminate, very densely multi-flowered, 35-45 cm. long, 5-6 cm. diam., usually terminating in a small tuft of wilted brownish bracts, the buds and flowers spreading downwards. Bracts lanceolate-acute, 14 mm. long, 7 mm. broad, thin scarious brownish, many nerved, very reflexed. Pedicels green, 3 mm. long. Perianth crimson above, the underside lemon, curved-cylindrical, up to 50 mm. long, the base rounded, not stipitate, about 7 mm. diam., enlarging to about 9 mm. above the middle thence slightly narrowing to the mouth, somewhat laterally compressed. Outer segments connate into a tube for 30 mm., the free portion 20 mm., the 2 upper segments scarlet with 5 reddish nerves turning slightly brownish at apex, the margins paler, the apices sub-acute and slightly falcately connivent, the lowest segment lemon, with 3-5 deeper lemon nerves, the apex sub-acute straight. Inner segments free but dorsally adnate to the outer to about the middle, with thin white margins; the uppermost segment with a 20 mm. keel the colour of the perianth turning brownish at apex; the 2 lowest segments with a less pronounced keel formed by 3 crowded, greenish nerves. Filaments distinctly flattened, pale lemon within the perianth, the 10 mm. exserted portion brownish-orange. Anthers exserted 10 mm. Style vellower than the filaments, the exserted portion not changing colour. Stigma at length exserted 10-12 mm. Ovary olive green, 9 mm. long, 4 mm. diam, at base. Capsule 25 mm. long, 14 mm. diam.

Aloe Lettyae, Reynolds. Species nova in sectione Saponariarum. Planta succulenta, acaulescens. Folia circiter 20, dense rosulata, erectopatentia, lanceolato-attenuata, usque ad 45 cm. longa, 9 cm. lata, supra

et subtus viridia et maculata, ad margines sinuato-dentata, dentibus deltoideis brunneis 3—4 mm. longis, 10—15 mm. distantibus armata. Inflorescentia 1·75 met. alta; scapus 8—12-ramosus. Racemi cylindrici leviter acuminati, usque ad 20—25 cm. longi, 8—9 cm. diam. Bracteae deltoideo-acuminatae, pedicellis aequantes. Perigonium rubrum, 38—42 mm. longum, basi globoso-inflatum et 10—11 mm. diam., supra ovarium constrictum et 6 mm. diam., hine leviter decurvatum et fauces versus leviter ampliatum. Segmenta exteriora per 10 mm. libera, interiora latiora et obtusiora. Genitalia 1—2 mm. exserta. Ovarium 8 mm. longum, 3·5 mm. diam.

Hab. Northern Transvaal: Cultivated plant ex. Westfalia, fl. March, 1935, in Pretoria, Letty 299!; Duivelskloof, April, 1936, van Balen! Nat. Herb. 21357; near Duivelskloof in long grass and among bushes, alt. 3,100 ft., fl. 26 March, 1937, Reynolds 2339! (type) in National Herb., Pretoria, and in Bolus Herb., Kirstenbosch. (Plate 21.)

This new Aloe is named after Miss C. Letty, (Artist at the Division of Plant Industry, Pretoria) who collected it about 3 years ago near Duivelskloof, northern Transvaal, and whose coloured Plates in Flowering Plants of South Africa are so well known. Up to the present Miss Letty has figured about 400 species of various genera, of which about 50 are of Aloe.

A. Lettyae occurs in long grass and among bushes and trees on eastern slopes of the northern extremity of the Drakensberg near Duivelskloof, and southwards to near the top of Magoebas Kloof, and is described from personal observations at those localities during 1936-37.

The species appears to occur as solitary plants, small groups were not noticed. It is distinguished from other known species in the section Saponariae by the shape of the flowers, and the leaf markings. As will be noticed from the accompanying figure, the base of the perianth is remarkably globular, and although flowers vary in length and width, judging from much material examined, the globular basal swelling appears to be a fixed character. In all plants examined the leaf lower surface was obscurely spotted, which also appears to be a fixed character. The marginal teeth are mostly 3—4 mm. in length, and not joined by a heavy corneous edge. In the largest specimens the inflorescence reaches 5—6 feet in height, bearing a total of about 20 racemes. In plants growing in shady, protected positions, the bracts are more fleshy and longer than their pedicels, while in more exposed positions they are more scarious and shorter.

A. Lettyae appears to be nearest allied to A. deWetii Reynolds hereinafter described, but differs principally with leaves spotted on both sides, the laxer less acuminate racemes, and the globular basal swelling of the

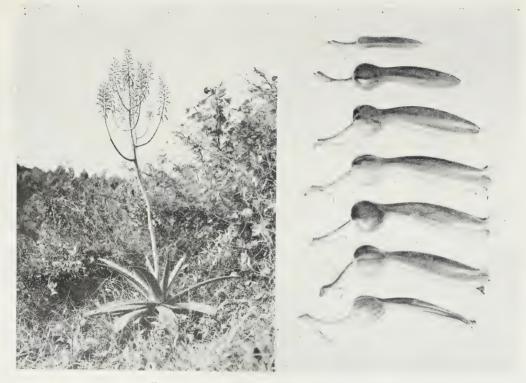


Fig. 1. Fig. 2.

Fig. 1. Plant in natural habitat, fl. 26 March, 1937, near Duivelskloof, Northern Transvaal, height 5 ft. Fig. 2. Flowers 1/1, from bud to post-pollination stage. (Note the very globular basal swelling.)

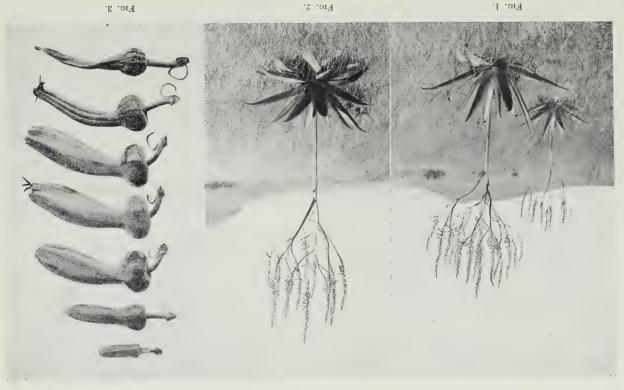


PLATE 22. Alos ds Weiri Reynolds.

Fres. 1-2. Plants in natural habitat, 4 miles east of Alpha in the Mkuzi River valley, Zululand (26 miles east of Vryheid on the road to Nongoma), fl. 6 March, 1937, height 6 ft.

Fres. 3. Flowers 1/1, from bud to post-pollination stage.

perianth. A. transvaalensis O. Kuntze is a smaller plant with very different leaves and flowers, while A. komatiensis Reynolds, which also flowers in February-March in the bushveld between Kaapmuiden and Komatipoort, is distinguished by longer, much narrower leaves, and differently shaped smaller flowers. A. Simii Pole Evans is another February-flowering ally, but has thinner unspotted greyer leaves, much laxer racemes, and differently shaped flowers.

Plants are at present in cultivation in the garden of the Botanical Section, Division of Plant Industry, Pretoria, Nos. 1306/7.5.36, and in the National Botanic Gardens, Kirstenbosch No. 1257/36.

Description.—Plant succulent, solitary, not stoloniferous, acaulescent, Leaves about 20 in a dense rosette, erectly spreading, lanceolate-attenuate, up to 45 cm, long, 9 cm, broad at base; upper surface slightly concave. dull green with numerous dull white spots throughout, the spots elongate and scarcely arranged in undulating transverse bands; lower surface convex, dull green, obscurely spotted throughout, the spots larger, more obscure and more in undulating transverse bands; margins sinuatedentate, armed with deltoid brownish firm teeth about 3-4 mm. long. 10-15 mm. distant, the interspaces usually the colour of the leaf, sometimes slightly corneous and pale brownish. Inflorescence a branched panicle up to 1.75 met. high. Peduncle flattened low down, about 3 cm. diam.. 8-12-branched from about the middle, the lowest branches with 1-3 branchlets producing a total of 15-20 racemes. Racemes cylindric slightly acuminate, the terminal the highest, 20-25 cm, long, 8—9 cm. diam. Bracts deltoid-acuminate, about as long as their pedicels. thin subscarious pale brown, 3-5-nerved. Pedicels 12-15 mm. long. Perianth nearest Rose Red (R.C.S. XII), 38-42 mm. long, with a globular basal swelling 10-11 mm. diam., constricted to 6 mm. above the ovary, thence slightly decurved and enlarging towards the throat. the mouth slightly pale brownish. Outer segments free for 10 mm., obscurely nerved, with paler margins and sub-acute slightly spreading apices. Inner segments dorsally adnate to the outer for 30 mm., broader than the outer, with broader white marginal border and more obtuse apices. Filaments almost white, the 3 inner narrower and lengthening in advance of the 3 outer. Genitals exserted 1-2 mm. Ovary 8 mm. long, 3.5 mm. diam., finely 6-grooved, green. Capsule 30 mm. long, 15 mm. diam. at middle.

Aloe deWetii, Reynolds. Species nova in sectione Saponariarum. Planta succulenta, acaulescens, nec stolonifera. Folia circiter 20, dense rosulata, erecto-patentia, lanceolato-attenuata, usque ad 48 cm. longa, basi 13 cm. lata; supra leviter canaliculata, viridia, albo-maculata;

subtus convexa, immaculata, obscure lineata; ad margines sinuatodentata, marginibus brunneis corneis, dentibus deltoideis brunneis, usque ad 10 mm. longis 10—15 mm. distantibus armata. Inforescentia usque ad 2 met. alta. Scapus medio circiter 10-ramosus. Racemi cylindricoacuminati, terminales usque ad 40 cm. longi, 7 cm. diam. Bracteae anguste deltoideae, 20 mm. longae, 3 mm. latae. Pedicelli usque ad 15 mm. longi. Perigonium sordide rubrum, 35—40 mm. longum, basi globoso-inflatum et usque ad 14 mm. diam., supra ovarium constrictum, 6—7 mm. diam., leviter decurvatum et fauces versus ampliatum. Segmenta exteriora per 6 mm. libera, obscure 5-nervata, marginibus pallidioribus; interiora latiora, obtusiora. Genitalia vix exserta. Ovarium viride, 10 mm. longum, 4 mm. diam.

Hab. Zululand: In the Umkuzi valley 4 miles east of Alpha, 26 miles east of Vryheid on the Nongoma road, fl. 6 March, 1937, Reynolds 2319! (type) in National Herbarium, Pretoria, and in Bolus Herb., Kirstenbosch. (Plate 22.)

This new species is found in fairly large numbers in flat grassy places. or gentle slopes, in the Umkuzi valley 4 miles east of Alpha, which is 26 miles east of Vryheid, on the road to Nongoma. It is named after Mr. J. F. de Wet, Headmaster, Vryheid Junior School. Mr. de Wet also records the species from near Ingwayuma in the Lebombo range, and has found specimens reaching a height of 8 feet, 6 miles north of Hlabisa, while the writer has collected plants which appear to be conspecific, at a point 7 miles south of Nongoma, Zululand. The species is described from personal observations at the Alpha locality during March, 1937. A. deWetii is nearest allied to A. Lettyae, and while due allowances must be made for species in the section Saponariae varying considerably in their different geographical stations, it appears to be specifically distinct. A most striking feature of A. deWetii is the leaves, which have a peculiar dull glossy appearance, as if rubbed with an oily cloth; the teeth are very stout, reaching a length of 10 mm., and are joined by a very pronounced horny brownish marginal edge. In A. Lettyae the leaves are duller, the marginal teeth much smaller, the interspaces hardly horny. Another difference is that in all plants of A. deWetii examined, the leaf lower surface was immaculate, while in A. Lettyae the lower surface was always obscurely spotted. A deWetii also differs from A. Lettuae in the more nerved bracts, the comparatively broader redder flowers, which have a broader but less globular basal swelling, and are more thickly coated with bloom. Reference to the accompanying figures will show the difference in the inflorescence; in A. deWetii the racemes are slightly denser, longer and more acuminate than those of A. Lettyae,

Plants are at present in cultivation in the garden of the Botanical

Section, Div. of Plant Industry, Pretoria, No. 1515.7.36, and in the National Botanical Gardens, Kirstenbosch, No. 1713/36.

Description.—Plant succulent, acaulescent, solitary, not stoloniferous. Leaves about 20 in a dense rosette, erectly-spreading, lanceolate-attenuate. up to 48 cm. long, 13 cm. broad at base; upper surface slightly canaliculate, dull green, with numerous dull white spots throughout, the spots elongate, irregularly scattered, sometimes arranged more or less into a series of irregular undulating transverse bands; lower surface convex. immaculate, obscurely lineate; margins sinuate-dentate with a pronounced heavy corneous brown edge, armed with deltoid pungent stout brown teeth up to 10 mm. long, 10-15 mm. distant. (Note: The leaves have a peculiar dull glossy appearance, as if rubbed with an oily cloth.) Inflorescence a branched panicle up to 2 met. high in large specimens. Peduncle about 5 cm. diam. low down, brownish, covered with a greyish powdery substance, about 10-branched from about the middle, the lowest branches with 1-4 branchlets producing a total of 15—25 racemes, the lowest branch subtended at base by a rather fleshy bract up to 9 cm, long, 3 cm, diam, with a few teeth near apex. Racemes the terminal the highest, cylindric-acuminate, up to 40 cm. long, 7 cm. diam., lateral racemes shorter. Bracts narrowly deltoid, 20 mm. long, 3 mm, broad at base, thin scarious brownish 7-9-nerved. Pedicels the lowest of terminal racemes up to 15 mm. long. Perianth dull scarlet with a bloom, 35-40 mm. long, with a basal swelling up to 14 mm. diam., constricted to 6-7 mm. above the ovary, thence slightly decurved and enlarging towards the throat, the mouth distinctly trigonous. Outer segments free for 6 mm., obscurely 5-nerved, with paler margins, the apices sub-acute brownish. Inner segments broader than the outer, the apices more obtuse. Filaments white, much flattened, the 3 inner narrower and lengthening in advance of the 3 outer. Anthers scarcely exserted. Stigma at length exserted 1-2 mm. Ovary green, 10 mm. long, 4 mm. diam., finely 6-grooved. Capsule 30 mm. long, 16 mm. diam., for some time enwrapped with the remains of the dry perianth.